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# PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)
2003-091-01

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

on April 26, 2010 (FILED ELECTRONICALLY)

Signature Doreen Day

Typed or printed name Doreen Day

| | |
|---|---|
| Application Number<br>10/681,618 | Filed<br>10/08/2003 |
| First Named Inventor<br>James A. Williams | |
| Art Unit<br>2187 | Examiner<br>Matthew A. Bradley |

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

☑ attorney or agent of record.
Registration number 38,520

☐ attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 ______

Signature

Petar Kraguljac
Typed or printed name

(216) 503-5500
Telephone number

April 26, 2010
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

☐ *Total of ______ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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**PATENT**

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:
James A. Williams *et al.*

Serial No.: 10/681,618

Filed: October 8, 2003

For: ***Access Controller for Storage Devices***

Notification Date of Final Office Action
January 26, 2010

Examiner: Matthew A. Bradley

Art Unit: 2187

Confirmation No. 7286

Attorney Docket No.:
2003-091-01

## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop Appeal
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Responsive to the Final Office Action of January 26, 2010, Applicant respectfully requests a Pre-Appeal Brief Conference Review of the application.

## Arguments for Pre-Appeal Brief Review

This communication is responsive to the Office Action of January 26, 2010.

Applicant requests review of the rejections in the above-identified application.

No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reasons stated herein. No more than five (5) pages are provided.

### I. Claims 1-5, 8-12, 25-27, 29-34, and 38 were rejected under 35 USC §102(b) as purportedly being anticipated by Christenson et al.

Independent Claim 1

The rejection is improper because each and every claimed element has not been found as required by MPEP 2131 and 35 USC 102. The examiner relies on Christenson, which discusses processing jobs based on the priority of the job. Claim 1, however, recites controlling access requests "by metering access to data within a first predefined region within the storage device and by allowing unmetered access to data within a second predefined region." Thus, what is metered and unmetered is dependent upon the predefined regions within the storage device, not the job priority. This is a clear error in fact. A prima facie rejection has not been established and the rejection should be reversed.

The controller of Christenson is not configured to allow metered access to one region and unmetered access to another region. This is not taught or suggested. The examiner relies on col. 12, lines 15-32 of Christenson (Final OA, page 13) as allegedly teaching these features. The cited text states:

> Prioritizing Requests
>
> In addition to the DASD partitioning discussed above, requests for the data are dependent upon the priority of the job or task of the overall application in accordance with another aspect of the present invention.

> To that end, at execution of a particular program or application, jobs or tasks associated with the application are designated as high priority or low priority. Requests for HOT data from high priority jobs are handled first. Next, requests for COLD for a high priority job is handled. Not until all the data for the high priority job has been accessed will a request for HOT data for a low priority job be handled. Finally, the request for COLD data from a low priority job is handled. In that way, the priority of the job will dictate the data access and the designation of the requested data as HOT or COLD will also affect the prioritization of data access.
>
> (col. 12, lines 15-32) (Emphasis added)

Hence, Christenson discusses the following order:

1. Requests for data are dependent on the priority of the job (not a region).
2. First process high priority jobs that access HOT data (regardless of region).
3. Next, process high priority jobs for COLD data (regardless of region).
4. When all high priority jobs are processed, then return to the HOT data and process a low priority job for HOT data.
5. Lastly, low priority jobs that access COLD data are processed.

The disclosed process fails to teach or suggest "unmetered access to data within a second predefined region within the storage device" as claimed. HOT data in Christenson is not given unmetered access because access to HOT data from a low priority job is delayed in favor of access to COLD data from a high priority job. A particular "region" is not involved or considered in the process of Christenson. COLD data is also not specifically metered or given unmetered access. Christenson flip-flops between accessing HOT data and COLD data based on job priority, not based on predefined regions within the storage device. Therefore, no predefined region in Christenson is given unmetered access as claimed and no predefined region is given metered access. The examiner has made a clear error and a prima facie anticipation rejection has not been established.

The examiner attempts to read Christenson onto the claim language by (1) ignoring the entire teachings of Christenson and (2) by misinterpreting the teachings. The error in (1) is that the examiner views only one small portion of Christenson, namely, "access to HOT data is given first over access to COLD data" (Final OA, page 13, 2nd and 3rd paragraphs). This clearly ignores the fact that other requests for HOT data (from low priority jobs) are being delayed in order to process accesses to COLD data from high priority jobs (col. 12, lines 25-27). Therefore, Christenson does not teach giving the HOT data unmetered access as the examiner alleges. Thus, the examiner has failed to consider the reference "as a whole" in violation of MPEP 2141.02.

The error in (2) is that the examiner's interpretation is incorrect. The examiner assumes that "HOT data" is defined as data that is in a "HOT partition". This interpretation is explicitly contradicted by Christenson. Christenson explicitly does not define "HOT data" as data stored in a specific region (e.g. "HOT partition") but rather is defined by the frequency of access of the data:

> To that end, the data stored on the DASD units must be identified as either HOT data, COLD data, or neither. As will be appreciated, not all data will be HOT or COLD. HOT data will be considered data that is accessed more frequently than the average data, whereas COLD data will be considered to be data which is accessed less frequently with respect to the average data on a DASD unit.
>
> (Christenson, col. 7, lines 11-19) (Emphasis added)

Therefore, data is not defined as "HOT" because it is in a HOT region/partition. As further evidence, Christensen explicitly states that HOT data is at times stored in a COLD partition: "...HOT data which is found in the COLD partition..." (col. 10, lines 64-65). Likewise, COLD data is at times stored in a HOT partition: "...COLD data which is in a HOT partition is moved..." (col. 11, lines 10-

11). Thus, the examiner's interpretation is incorrect. The examiner's rationale is flawed and has failed to establish a prima facie anticipation rejection.

Furthermore, Christenson is directed to moving data to continuously changing locations in the storage device based on utilization of the device. Therefore, a presumption cannot be made that there is a predefined HOT region or predefined COLD region:

> For example, a unit may be considered overutilized or underutilized but then may receive certain portions of HOT data or COLD data which may change its status. For example, an underutilized DASD unit which is receiving a large amount of HOT data may become overutilized. Similarly, an overutilized DASD unit which is having HOT data taken therefrom, which is replaced with COLD data, may quickly become underutilized.
>
> (Christenson, col. 10, lines 41-49) (Emphasis added)

As clearly stated above, a DASD unit can have its status changed since HOT data can be replaced with COLD data and vice versa.

Accordingly, when considered in its entirety Christenson fails to teach each and every element of claim 1 and fails to establish a prima facie anticipation rejection. The rejection should be reversed and claim 1 allowed. The other independent claims recite related features of metered or unmetered access dependent upon predefined regions. Thus all rejections are improper.

## **Conclusion**

For the reasons set forth above, all claims have been improperly rejection based on clear errors. The rejections should be reversed.

Respectfully submitted,

Peter Kraguljac (Reg. No. 38,520)